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CASE OF SPECTRAL ILLUSIONS.

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THE following case seems to possess considerable value in a scientific point of view, from the rare circumstance that the subject of it exhibits no impairment of her mental faculties, knows her false perceptions to be illusory, and is able to describe them in a very intelligent and graphic manner. She is a lady, considerably beyond eighty. of healthy constitution and vigorous mind, still takes a lively interest in passing events, and is surrounded by a circle of friends and acquaintances who cultivate her society for the attractive nature of her manners and conversation. It is proper to mention, that for more than a year, she has been debarred from both reading and writing, employments in which she previously took great pleasure, by the partial formation of cataract in both eyes. Although vision is thus considerably impaired, she is by no means in darkness, but is able to recognize large objects, and, to a certain extent, the persons of her intimate friends. In other respects she enjoys good health, without being exempted from occasional catarrhal affections and temporary disturbances of the digestive function.

In the month of July, 1865, she began to be annoyed by noises which she likened to the ringing of bells of various sizes; some of them small and clear, others so loud and deep in their tone as to resemble church bells in close

proximity to the back of her bed. About the same period she observed on the curtains and on the walls of the room a variety of beautiful landscapes, in some of which were figures of men, women, and children, which occasionally seemed to be in motion. These landscapes underwent frequent changes in the manner of what are called dissolving views. Sometimes, in place of them, every surface—the bedclothes, the curtains, the walls—are covered with tasteful patterns, as of embroidery or carving in wood. Not unfrequently the air of the apartment was occupied with what seemed to be a dense fall of snow. These false visual perceptions were little influenced by the amount of light or by closing the eyelids, although they were more distinct at certain periods of the day than at others. The noises, however, were invariably loudest and most distracting during the night.

As a general rule, the pulse was unaffected. There were no indications of cerebral congestion; no flushing, no headache, no giddiness. Her most comfortable time was for an hour or two after retiring for the night, when she usually partook of a moderate allowance of gin and warm water. She was in the custom of falling asleep almost immediately, and of awaking free from both the ringing of bells and the phantasms. Both of these sources of annoyance, however, were sure to return after a short interval, and the remainder of the night was spent very uncomfortably.

Various things were tried without obvious benefit—iron, opium, henbane, aconite. The stomach being in some degree out of order, probably from continued sleeplessness and mental distraction, powders were prescribed, containing rhubarb, potash, and calumba. Under the use of these, in sufficient doses to regulate the bowels, considerable improvement took place, the noises becoming greatly moderated and the phantasms much less vivid.

About the end of September the temporary improvement ceased, and the phenomena underwent a remarkable modification. Instead of landscapes and carved work, she now saw innumerable female heads and busts covering every surface on which she turned her eyes—the bed, the curtains, the walls of the room, the carpet, and even the

persons of her attendants. All the countenances were pleasant to look upon, some of them very beautiful; no two faces were alike, and none, at this time, bore any resemblance to people she had ever seen before. The costume and mode of arranging the hair were quite different from what we meet with in the present day. The faces were varied every morning, sometimes more frequently, and the style of dress underwent corresponding changes. The spaces left betwixt the full-sized forms were filled by others on a smaller scale. If, as sometimes happened, one of the larger faces was seen in the space previously occupied by a real picture suspended on the wall of the room, it was always observed to be accurately in the centre of the frame. All these heads had the appearance of exquisitely finished pictures, and were exclusively female, the majority of them young and beautiful.

On the 11th of October the faces were, for the first time, *male*, with large, strongly-marked features and dark eyes, which glared upon her and seemed occasionally to move. On the 12th they were still masculine, but milder in expression, and a certain number seen in profile. Next day the portraits suddenly disappeared, and were succeeded once more by representations of beautiful carved work in oak and mahogany, such as baskets filled with flowers and other things of an analogous nature; these being replaced, in their turn, by tabular inscriptions, apparently in a foreign language, which she was quite unable to decipher. Another day came, and all these things were superseded by an array of female heads, with a few men interspersed, among whom she recognized the well-known features of Dr. Thomas Chalmers and a profile of Professor Miller.

Subsequently to this, for several weeks, the human faces gave place to an inexhaustible succession of wood carvings, apparently, as before in oak and mahogany, of flowers, geometrical figures, and patterns of female ornaments.

Early in December the faces returned in great numbers, and were much more distracting and oppressive, from the circumstance that, instead of resembling portraits as formerly, they were now entirely life-like, both in size and colour. Moreover, the eyes were now seen to move, and

were full of meaning. The great majority were youthful and good-looking, with the hair tastefully combed back from the forehead, and in some instances powdered. On the curtain, at the foot of her bed, she could count ten rows of these countenances, with eight individuals in each row. Occasionally she recognized her deceased husband in the crowd; but this, like the other instances already mentioned, was an exception to the general experience, that the countenances had never been seen before.

Towards the close of the year the faces became, if possible, still more distracting to my patient. They were intensely life-like, the eyes moving, and even the mouths opening and shutting in a very disagreeable manner. Sometimes a small picture or fac-simile of the individual would emerge from the eye or mouth, and then gradually enlarge until it took the place of the original. The faces answering to this description were very numerous—men, women, children. They were no longer arrayed in the costume of a former generation, but in the garb of the present day; and many of both sexes were eminently handsome. It was noticed at this time, as on one or two previous occasions, that the illusions became greatly moderated, contemporaneously with the accession of a certain degree of febrile disturbance.

During January, 1866, a good many variations took place in the phenomena, the figures being one day numerous, large, and disagreeable, on another day, small, bright, and beautiful, gracefully arranged upon a straw-coloured surface, like a vision of fairyland. As formerly noticed, they invariably disappeared at once when she had swallowed her allowance of gin and water on retiring to rest. The same effect was produced on one or two occasions during the day, when, in consequence of the illusions being more oppressive and distracting than ordinary, she had recourse, after some persuasion, to the same remedy. At this period the effect of an opiate was again fairly tried, but little benefit was experienced, and it seemed to derange the system.

Since the beginning of February there has been a gradual but very decided amelioration. During a few days, in place of human figures, she saw in one corner of the

apartment, a group of beautiful grey horses, as large as life, and, at the foot of her bed, a crowd of tortoise-shell kittens, with their eyes intently directed towards her. These living objects were succeeded once more by patterns of embroidery and wood-carving, and, several times lately, on awaking from sleep, about midnight, she has observed five male heads peering at her over the foot-board of the bed, while she seldom fails to see in one corner, a pleasant looking young matron quietly engaged with her work. Generally speaking, her condition is much more comfortable than it was for many months ; the noises are now quite bearable ; she takes her food with considerable relish, and has recovered her wonted cheerfulness which the long continued distraction had well-nigh taken away.

The chief point of interest in the foregoing history, is the perfect conviction on the part of the lady herself that the perceptions of which she was conscious had no external or tangible origin. As they were confirmed neither by her own sense of touch, nor by the senses of her friends, her sound judgment pronounced them to be illusory ; had she been incapable of thus exercising her reasoning faculty, she must have fallen into the error of other persons, similarly affected, and have believed the perceptions to be real. In strict language, they *are* real ; as real as the normal perceptions of sight and hearing, of which we are all conscious. But there is this distinction, these abnormal perceptions are *subjective* in their cause, depending upon a condition of the sensorium induced *ab intra* ; whereas, normal perceptions are *objective*, and caused by impressions made, *ab extra*, on the nervous structures of the eye and ear. The physical causes of these subjective perceptions are necessarily very obscure. That they are independent of organic change of structure is more than probable, from the very noticeable fact, that the psychical phenomena undergo so many variations, and sometimes cease entirely. May we suggest, that whatever lesions of a permanent nature may sometimes be discovered after death, either in the substance or in the membranes of the brain, these illusory perceptions are occasioned by more or less disturbance of the capillary circulation in certain structures intimately connected with sight and hearing—

namely the *corpora quadrigemina* and the *auditory ganglion*?

Mr. Craig of Rath, has published a remarkable case,* in which spectral illusions, resembling in many points those which I have described, continued to recur during the long period of twelve years, and were ultimately superseded by serious and fatal lesions of the brain.

Some years ago, I attended a lady, upwards of sixty, who had been for a long time afflicted with an abiding noise in the head, so loud and distracting that she compared it to the clashing together of metallic vessels. It continued for several years, uninfluenced by treatment. One day, I found her rejoicing in a sudden and complete cessation of the morbid sounds; before the lapse of many hours, she had an apoplectic seizure with *hemiplegia*. She recovered her senses and lived a paralytic for some years; but the noises never returned. A post-mortem examination could not be obtained.

These instances confirm the very obvious conclusion, that perceptions, depending on subjective causes, whatever the exact nature of these may be, are sources of anxiety, particularly in persons well advanced in years, with whom the vascular system is prone to fatty degeneration and other morbid changes.

It appears to me, that the medical treatment ought to be regulated by a due regard to all the circumstances of the case, and not by any preconceived theory.

In the case related in these pages, there has never appeared to be any call for depletion; and, indeed, the opposite plan of procedure has generally afforded at least temporary benefit. On the other hand, it was found in Mr. Craig's case, that any addition to the small quantity of wine, to which the patient restricted himself, always increased the number and vivacity of the images.

Let me add, in conclusion, that a case, such as the foregoing, in which abnormal perceptions are accompanied by an unclouded state of the mind, capable of recognizing

* Edin. Med. and Surgical Journal, No. 129. To Mr. Craig's account are appended some valuable pathological observations by Dr. David Craigie, which will amply repay a careful perusal.

their true nature, may give us insight into recorded instances of spectral illusions in which the mind itself was in all probability disordered. Need we wonder also at the psychical phenomena exhibited in fever, in phrenitis, in delirium tremens, where, in addition to the parts of the *encephalon* specially associated with sight and hearing, we have reason to believe that the whole cerebral mass is more or less affected, either by inflammatory action or by a poisoned condition of the blood, when we know that it is possible for such an infinite variety of landscapes and figures, animate and inanimate, to be spread before the mental eye of one whose reasoning faculty pronounces them to be illusions? Let us suppose *that* ruling faculty to be in complete or partial abeyance, with similar phantasms crowding in endless variety upon the sufferer, and we shall have, as it appears to me, a ready explanation of much that is absurd, impulsive and violent in the behaviour of many who are in that unhappy predicament.



